

At present, there is no regulatory or legislative requirement in Hawaii for discount programs for telecommunications services for schools, libraries and health care providers. In an approach similar to the one recommended herein, GTE initiated a program in Hawaii that provides free education credits of up to \$2,000 each, as well as consulting services, to public K-12 schools and public libraries. Rather than taking a 'cookie cutter' approach, this plan provides technology to schools on educators' terms, allowing them to select the telecommunications services that best meet their needs.

19. Should an additional discount be given to schools and libraries located in rural, insular, high-cost and economically disadvantaged areas? What percentage of telecommunications services (e.g., Internet services) used by schools and libraries in such areas are or require toll calls?

GTE's recommended approach described in response to question number 12 *supra* would allow the administrator to provide a greater proportion of funds for schools and libraries in rural, insular, high-cost and economically disadvantaged areas. This approach would avoid a complex process of discounts on top of discounts.

GTE has no knowledge of the proportion of information services used by rural entities that require a toll call. However, question number 19 incorrectly equates "Internet services" to the "Telecommunications Services" that are eligible for support under the 1996 Act. Information services, such as those available from an Internet access provider, do not fall within the definition of the telecommunications services to be supported under '254. Compare §153(a)(38) ("Telecommunications") and (41) ("Telecommunications Service") with §153(a)(20) ("Information Service"). In fact, the title of '254(h) that establishes special funding for educational entities is "Telecommunications Services for Certain Providers" (*emphasis added*).

20. Should the Commission use some existing model to determine the degree to which a school is disadvantaged (e.g., Title I or the national school lunch program)? Which one? What, if any, modifications should the Commission make to that model?

No response.

21. Should the Commission use a sliding scale approach (i.e., along a continuum of need) or a step approach (e.g., the Lifeline assistance program or the national school lunch program) to allocate any additional consideration given to schools and libraries located in rural, insular, high-cost, and economically disadvantaged areas?

No response.

22. Should separate funding mechanisms be established for schools and libraries and for rural health care providers?

No, funding for entities eligible for support under §254(h) should be obtained in the same manner as funding for “core” universal service. The Federal fund administrator should add together all funding requirements and collect the necessary funds through a single mechanism. This should include funds for “core” universal service, low income individuals, educational and rural health entities, and any other universal service support the Commission adopts. The only competitively neutral collection mechanism available is a surcharge applicable to end user retail revenues. Any other collection mechanism would introduce distortions into the market.

As described in the response to question number 12, separate distribution processes are appropriate for educational entities and rural health care providers because of the different treatment of their support under the 1996 Act.

23. Are the cost estimates contained in the McKinsey Report and NII KickStart Initiative an accurate funding estimate for the discount provisions for schools and libraries, assuming that tariffed rates are used as the base prices?

GTE has no direct knowledge of the accuracy of the cost estimates, but without evidence to the contrary, the estimates must be assumed to be reasonable. Further, the study provides a template for estimating the relative amount of funding needed for different levels of services.

24. Are there other cost estimates available that can serve as the basis for establishing a funding estimate for the discount provisions applicable to schools and libraries and to rural health care providers?

No response.

25. Are there any specific cost estimates that address the discount funding estimates for eligible private schools?

No response.

High Cost Fund

General Questions

26. If the existing high-cost support mechanism remains in place (on either a permanent or temporary basis), what modifications, if any, are required to comply with the Telecommunications Act of 1996?

The 1996 Act requires the Commission to adopt a new Federal universal service plan, taking into consideration the recommendation of the Joint Board. The current USF mechanism cannot serve this purpose, because it is inconsistent with the requirements of the 1996 Act. Rather than attempt to modify the current USF, the Commission should develop a new framework which is better suited to a competitive environment. However, the existing USF could have a place within the overall policy framework the Commission adopts.

Specifically, GTE suggests that all price cap companies, and all companies serving non-rural areas, should transition to the new Federal universal service plan. The current USF mechanism would be retained for non-price cap companies serving rural areas. These companies would have a one-time option to switch to the new Federal plan at any time; once a company had exercised this option, it would not be permitted to return to the USF. At the end of some period (say five years) the Commission could review the USF to determine whether it should be continued, or whether companies then remaining on USF should be brought into the new Federal plan.

In principle, it makes sense for each area to be treated the same, regardless of the company that serves it. As a practical matter, however, the circumstances of the rural telephone companies differ from those of the large ones, and vary significantly as well from one small company to another. The task of developing a new Federal plan for adoption in May, 1997, will be made much more difficult if the Commission attempts to make that plan fit all of the incumbent companies, and there will be a risk as well of unreasonable shocks to certain companies. The most pressing need for a new Federal plan to meet the requirements of the 1996 Act is in the areas now served by the large companies. These are the areas where competition is developing most rapidly, and where the incumbent LECs have been obliged to rely most heavily on implicit sources of support from their own services. The Commission should focus its efforts in the coming months on developing a new Federal plan for these areas that is targeted to small geographic areas, that is sufficient, that is competitively neutral, and that will

replace the current implicit support flows, so that distortions in the larger ILECs' rates can be corrected.

While the current USF is far from perfect, it is more targeted in rural company areas simply because these study areas are small. It is also more sufficient in rural company areas, so that these companies' reliance on implicit support is less. It is therefore reasonable, and consistent with the requirements of the 1996 Act, for the USF to be continued in its present form for small companies within the context of a larger policy that includes a new plan for price cap and nonrural companies.

27. If the high-cost support system is kept in place for rural areas, how should it be modified to target the fund better and consistently with the Telecommunications Act of 1996?

The Commission should not expend effort attempting to "fix" the current USF. It is better to develop a more competitively neutral plan, and then, once that plan has been proven as applied to larger companies, consider whether small companies should adopt a version of it as well.

28. What are the potential advantages and disadvantages of basing the payments to competitive carriers on the book costs of the incumbent local exchange carrier operating in the same service area?

The objective of a cost-based universal service plan should be to use the cost measure as an estimate of what the market price of the "core" service would be in a competitive market.²⁰ This is necessary to ensure that the price the COLR sees -- the sum of the rate the customer pays and the support payment -- is the right price signal

²⁰ This is not a complete measure of the compensation that should be provided to COLRs, because it does not include the value (positive or negative) of any non-price aspects of the COLR obligation. A bidding process would measure all aspects of the COLR obligation the bidders themselves believed to be relevant.

for entry and investment decisions by prospective COLRs. In order to be competitively neutral, the support level should be the same for any carrier in a given area that undertakes the same COLR obligation.

This price estimate should be based on ILEC costs, since ILECs are the current COLRs, and because they provide the bulk of the supply capacity in the industry today. The question then arises as to whether embedded ILEC costs should be used, or a forward-looking estimate based on ILEC technology and network practices.

In general, the market price in a given market will be based on the average cost of the suppliers in the industry. In this sense, the average cost of capacity in the industry is relevant; this would argue for using ILEC average (*i.e.*, embedded) costs to form the universal service cost estimate. If technology makes possible a lower cost on a forward-looking basis, this fact, in and of itself, will not change the market price. The price will change only as firms actually install capacity to produce at the lower cost. Indeed, the first firm to adopt the technology will generally not affect the price greatly, if it supplies only a part of the demand; instead, the price will continue to be based on the average cost, and the low-cost firm will earn rents, for a time, as a reward for its innovation. Then, as more firms adopt the new technology, the price will be driven down. At the end of this adoption process, there will be enough capacity to serve the entire market at the lower cost. By this time, the price will have been driven to the new (lower) average level, the transitory rents will have been competed away, and all of the benefits of the new technology will have been passed on to consumers. The value of any older plant will have been reduced. But all of this would have happened only as firms could actually supply at the lower cost. A strong argument can therefore be made

that the estimate of market price at the outset of the new universal service plan should be based on the cost of the (ILEC) capacity that is actually supplying the market at that time. This would provide the correct incentives for new firms to enter if they can supply at lower cost.²¹

Several objections have been raised to basing support on ILEC embedded cost levels. The first is that if such estimates are adjusted over time to reflect ILEC book costs, an incentive will be created to inflate those costs, since this would create additional support. GTE agrees. However, no such incentive would be created if support levels are established at the outset of the plan, and not adjusted to reflect changes in book cost from that time forward. In GTE's proposal, the need to adjust the cost estimate over time is avoided, since the bidding mechanism would be the means for correcting the level of support over time.

The second objection is that current ILEC book costs have already been distorted because of past regulation. Rate of return regulation may have encouraged ILECs to overinvest or may have imposed mandates that entailed a higher level of investment than a nonregulated firm would have chosen. Further, it is broadly accepted that depreciation allowances by state and federal regulators have been inadequate, so that costs incurred in past periods were not fully recognized at the time; this would cause current ILEC revenue requirements to include recovery of some of these past and underdepreciated costs. However, these concerns do not justify disregarding real ILEC costs, as some would suggest.

²¹ WELLER TO PROVIDE CITE from CA PUC comments.

GTE suggests that the effects of any overvaluation of ILEC plant because of insufficient depreciation is an issue that should be addressed separately from the main Federal plan to support COLR obligations on a going-forward basis. This valuation problem is inherently asymmetric, since it affects only incumbent LECs, and represents unrecovered costs of past COLR obligations, not of future ones.

Once this problem has been addressed, then it may be most reasonable for the Federal plan to be based on a proxy model that generates a forward-looking estimate of investment, reflecting (i) current ILEC network topology, and (ii) practices currently used by ILECs to place new equipment. The patterns of current ILEC operations should not be disregarded, as some parties suggest; they contain information about factors affecting ILEC costs which may not be fully captured by a model that attempts to design a network from scratch. The estimate should also include directly attributable expenses, as well as contributions toward shared and common costs; current ILEC levels for these expenses are the best available estimators.

The initial levels of support should be developed by comparing the rate COLRs are required to charge with this cost measure. Once new entrants are willing to undertake the COLR obligation in a given area, then the auction process -- described *infra* -- should supersede this cost-based approach.

29. Should price cap companies be eligible for high-cost support, and if not, how would the exclusion of price cap carriers be consistent with the provisions of section 214(e) of the Communications Act? In the alternative, should high-cost support be structured differently for price cap carriers than for other carriers?

Any carrier that undertakes the COLR obligation established by the state regulatory agency for a given area should be treated in the same manner. It should have the same obligations, and should receive the same level of support. This is

necessary for the plan to be competitively neutral, as the 1996 Act requires; for it to be sufficient; and to reduce the current level of implicit support in ILEC rates.

There is no basis for excluding some companies, or some areas, from universal service support, simply because they may be subject to a different form of regulation. As long as a market intervention is imposed on the rates and terms for local service, then a mechanism must be maintained to compensate carriers subject to that intervention in a competitively neutral way.

Price cap companies cannot be excluded from eligibility for high-cost support as a matter of law, for:

- (1) Price cap ILECs are "Telecommunications Carriers" as defined by §F153(39).
- (2) Price cap ILECs come squarely within the criteria for eligibility spelled out by §214(e)(1), *i.e.*, they (i) offer the services that are supported by Federal universal service support mechanisms under §254(c), using either their own or a combination of their own and resold services; and (ii) advertise the availability of such services using general media.
- (3) As COLRs that currently offer services subsuming the "core" universal service, price cap ILECs have been *de facto* recognized by state regulatory agencies as eligible telecommunications carriers.
- (4) Any universal service plan that precluded the price cap ILECs, representing service areas that embrace more than ninety percent of the people of the United States, would by definition fail to comply with the statutory mandate because, among other reasons, it would not be sufficient. See §254(e).

Reducing the amount of support provided to price cap companies as compared to that available to a similarly situated non-price cap company would be arbitrary and capricious because:

(1) §254(b)(5) requires "specific, predictable and sufficient" mechanisms to preserve and advance universal service.

(2) The underlying intent of the 1996 Act is to foster genuine competition among all telecommunications service providers.²²

(3) Commission action that would arbitrarily reduce the amount of support available to a price cap ILEC would result in compelling that ILEC to contribute to universal support while denying that ILEC a reasonable opportunity to receive support -- as contemplated by Congress -- in respect of additional costs imposed by virtue of its COLR status..²³

30. If price cap companies are not eligible for support or receive high-cost support on a different basis than other carriers, what should be the definition of a "price cap" company? Would companies participating in a state, but not a federal, price cap plan be deemed price cap companies? Should there be a distinction between carriers operating under price caps and carriers that have agreed, for a specified period of time, to limit increases in some or all rates as part of a "social contract" regulatory approach?

There is no reason why the new Federal plan should apply differently based on the form of regulation applied to that carrier. All carriers subject to Federal price caps,

²² The preface of the Telecommunications Act of 1996 clearly states that the intent of the bill is "to provide for a pro-competitive, de-regulatory national policy framework" by "opening all telecommunications markets to competition."

²³ See Conference Report at 16: "To the extent possible, the conferees intend that any support mechanisms continued or created under new section 254 should be explicit, rather than implicit as many support mechanisms are today."

and all carriers serving nonrural areas (whether price cap or not) should adopt the new Federal plan. Other incumbent LECs should have the option of remaining under the current USF plan. The purpose of this distinction, however, would not be to account for any inherent difference between price cap and rate of return regulation as they relate to universal service. Rather, the intent of GTE's proposal is simply to use these categories to distinguish companies to which the new plan can readily be applied from the many small companies for which the old plan may be more appropriate, at least for a time.

31. If a bifurcated plan that would allow the use of book costs (instead of proxy costs) were used for rural companies, how should rural companies be defined?

The 1996 Act's definition of "Rural Telephone Company", §153(37), must be used in interpreting and applying the 1996 Act. This definition does not preclude rural study areas served by large holding companies. However, GTE suggests that areas served by price cap companies should be included in the new Federal plan, rather than under the current USF, regardless of whether a study area is "rural."

32. If such a bifurcated approach is used, should those carriers initially allowed to use book costs eventually transition to a proxy system or a system of competitive bidding? If these companies are transitioned from book costs, how long should the transition be? What would be the basis for high-cost assistance to competitors under a bifurcated approach, both initially and during a transition period?

Any company that continues on the USF plan under a bifurcated approach should have a one-time option to switch to the new Federal plan. After some period, say five years, the Commission should review the status of the USF to determine if it should be continued, or if USF should be ended, and LECs still remaining on USF transitioned to the new plan. If the Commission determines after five years that USF

should be ended, it can decide at that time what additional transition mechanism might be reasonable for companies moving from USF to the new plan.

If another COLR is authorized by the state commission to operate in the serving area of a rural, non-price cap company under this bifurcated arrangement, then competitive neutrality would require that the new COLR should receive the same level of support, on a per-customer basis, that the incumbent LEC receives from USF.

33. If a proxy model is used, should carriers serving areas with subscription below a certain level continue to receive assistance at levels currently produced under the HCF and DEM weighting subsidies?

No. The level of universal service support in an area should not depend on the level of subscribership there. As the record in the Commission's CC Docket No. 96-115 clearly shows, subscribership levels are affected by many more factors than price alone.²⁴ The COLR's obligation should be to provide service at the price and terms specified by the Commission.

A proxy model should not be used to distribute funds under the current USF structure. Under GTE's proposal, a rural, non-price cap company would have the option of remaining under USF if it believed that its ability to provide universal service would be harmed if it adopted the new plan. This should be the case, regardless of the level of subscription in the serving area.

²⁴ See GTE's Comments filed in CC Docket No. 96-115, September 27, 1995, at 2-6.

Proxy Models

34. What, if any, programs (in addition to those aimed at high-cost areas) are needed to ensure that insular areas have affordable telecommunications service?

Funds for "core" universal services for insular areas should be provided through the same universal service mechanism used for "core" services in mainland areas. Should the Commission determine that additional telecommunications services should be supported only for insular areas, funding requirements should be determined separately, if necessary, but the same mechanisms as used for "core" mainland service should be used to obtain and distribute the additional funds.

35. US West has stated that an industry task force "could develop a final model process utilizing consensus model assumptions and input data," US West comments at 10. Comment on US West's statement, discussing potential legal issues and practical considerations in light of the requirement under the 1996 Act that the Commission take final action in this proceeding within six months of the Joint's Board's recommended decision.

GTE agrees that every practical effort should be made to resolve differences among the models which have been presented to the Commission in this proceeding. However, GTE does not believe that an industry task force brought together by the Commission, and representing widely diverging interests, would be a useful method for resolving differences. GTE's recent experience in state workshops suggests that such a task force would expend more time on rhetoric than on resolution of substantive issues.

GTE suggests instead that, wherever possible, groups of like-minded parties should work together voluntarily to narrow their differences. GTE is working to promote such cooperation among parties who have proposed proxy models. If successful, these efforts will narrow the range of choices among competing models. However, it is likely

that it will not be possible to produce a single model that will achieve a consensus among all parties in this proceeding; thus the Commission will have to make a final determination, using the best information on the record. GTE urges the Commission to make such a determination as part of the final action it must take within six months of the Joint Board's recommendation.

36. What proposals, if any, have been considered by interested parties to harmonize the differences among the various proxy cost proposals? What results have been achieved?

GTE has worked actively with companies who have sponsored proxy models to determine how the differences between them could be minimized, or whether it might be possible to produce a single model reflecting the best features of each of the existing models.

37. How does a proxy model determine costs for providing only the defined universal service core services?

Each of the proxy models estimates the cost of those network components that would be required to provide the defined "core" service. They exclude from consideration services which are not included in the definition. However, the models do attempt to take into account economies of scope made possible by the provision of some other services, such as local business lines. Further, in GTE's experience, none of the currently available proxy models corresponds exactly to any well-defined economic cost concept. For example, none of the models produces a reasonable estimate of average-incremental (or "TSLRIC") cost.

38. How should a proxy model evolve to account for changes in the definition of core services or in the technical capabilities of various types of facilities?

The proxy cost model should not evolve. Its purpose is to provide an initial value for the support level in each area. After that, the auction mechanism will provide a better means for adjusting the support level over time.

Attempting to adapt the cost models over time would be a difficult process. None of the currently proposed models is an optimizing model; the models do not select the best technology for each situation on an objective basis. Rather, the models are designed to implement a given set of engineering practices or rules of thumb. In general, these practices are those now being used by the ILECs for the placement of new facilities. As GTE has explained in its previous comments, attempting to optimize over different technologies would make these models even more complex than they already are, and, by calling for a greater degree of extrapolation, would reduce their ability to estimate costs reliably.

Two years of effort to model the current LEC costs has yet to yield a single, agreed-upon modeling process. While GTE recommends that the Commission should select a model to provide the necessary starting point, the plan should be designed to avoid the need for revising the model over time. A plan that required updating the model would involve the Commission and the parties in an ongoing modeling process for the indefinite future, with a constant expenditure of resources and unnecessary contention among the parties. This can be avoided by adopting a plan which relies on a market-based approach, such as the auction process proposed by GTE, to update the support level over time.

39. Should a proxy model account for the cost of access to advanced telecommunications and information services, as referenced in section 254(b) of the Act? If so, how should this occur?

Section 254(b)(2) establishes the principle of “access to” advanced services, but does not include the usage of such services within the definition of “core” universal service. Stated another way, a person can use “core” universal service to access advanced services, but separate charges for such services are not required to be supported.

The cost proxy models should not address access to more advanced telecommunications and information services. By their nature, the proxy models are intended to be simplified replications of the process by which costs are developed for various core services. By adding more and more complex decision nodes to the modeling process, the algorithms get exponentially more complicated, the development and refinement process becomes more difficult, and the computational system requirements increase exponentially as well. The current proxy models are reasonably effective because they are only required to address relatively simple questions.

40. If a proxy model is used, what, if any, measures are necessary to assure that urban rates and rates in rural, insular, and high-cost areas are reasonably comparable, as required in Section 254(b)(3) of the 1996 Act.

Use of a proxy cost model has no direct relationship to the comparability of prices. The proxy cost model simply produces a cost output that can be compared to an affordable price level chosen by the FCC and the Joint Board to determine an amount of support to be made available in high cost areas. As long as the core service price is held to an affordable level on a nationwide basis, the price between rural and urban areas should be considered reasonably comparable.

41. How should support be calculated for those areas (e.g., insular areas and Alaska) that are not included under the proxy model?

To the extent that such areas are not served by Rural Telephone Companies, as discussed in the response to question number 26 *supra*, the selected proxy cost model should be modified to accommodate any relevant geographic area.

42. Will support calculated using a proxy model provide sufficient incentive to support infrastructure development and maintain quality service?

Yes, but only if the model is designed to provide a reasonable estimate of the costs that would determine a market price level. This will only be the case if : (i) the investment and expense estimates are realistic; (ii) the model algorithm reflects contemporary network design; (iii) the model reflects the fact that networks grow over time in response to demand growth; (iv) the cost of capital and depreciation reflect a competitive environment; and (v) the model captures all of the costs that a market price would recover, including a contribution toward shared and common costs of the firm. Models such as the Hatfield Model that use unreasonably low investment and expense estimates and pretend that perfect networks can materialize overnight will produce such low support amounts that there will be no incentive for network investment.²⁵

²⁵ The shortcomings of the Hatfield Model have previously been brought to the Commission's attention. See *Ex Parte* of GTE, CC Docket No. 96-98, July 11, 1996, providing an evaluation of the Hatfield Model conducted by Timothy J. Tardiff of NERA.

43. Should there be recourse for companies whose book costs are substantially above the costs projected for them under a proxy model? If so, under what conditions (for example, at what cost levels above the proxy amount) should carriers be granted a waiver allowing alternative treatment? What standards should be used when considering such requests?

See response to question number 26, *supra*. Use of a bifurcated approach that would allow rural companies to remain under the current structure for a transitional period would serve as a safety net to reduce the possibility that a company would experience a devastating change in support level.

See also the response to question number 42, *supra*. If a model is properly designed and allows each company to use expense, investment and other data representative of its circumstances, the errors in the proxy estimates can be minimized. Nonetheless, it is reasonable to expect that there will be significant errors in the cost estimates.

The auction process proposed by GTE would provide a mechanism for adjusting the support level to correct errors in the estimates.²⁶ This would certainly be the case in areas where the estimate is too high, since this would tend to attract bidders to those areas. The auction structure proposed by GTE would also allow the support level to rise, within limits, to correct estimates which are too low.²⁷ However, there may be cases where the cost estimate is too low, and the auction process is unable to correct

²⁶ This approach would also capture any differences in cost resulting from a change in the definition of "core" service over time, or changes in technology, or in input prices.

²⁷ See attached Statement of Paul R. Milgrom. As Professor Milgrom explains, if the auction mechanism failed to allow the support to increase, it would create a sample selection problem as bidders would be drawn only to those areas where the errors in the cost estimates were positive.

the problem because of a lack of bidders in the area. For this reason, GTE supports the inclusion in the plan of a "safety valve" mechanism through which a LEC could demonstrate that the estimate for a given area is too low, and seek an increase.

44. How can a proxy model be modified to accommodate technological neutrality?

There is no need to modify a proxy model to accommodate every conceivable technology. A model that accommodates the prevalent technologies used by ILECs will provide a reasonable estimate of the cost of providing "core" service today. There is no need to include all new technologies in a proxy model in order to ensure that the plan is neutral toward those technologies. Indeed, basing support on the current technology will provide a correct price signal to any firm considering the use of a new technology that might be cheaper. That firm will have the same incentive to innovate that a competitive firm would have.

If there is a concern here, it is not that the plan should be technology-neutral, or that the adoption of new technology should be encouraged. These objectives can be achieved using a model based on current technology. The concern might be that, over time, the support level might be too high. In a competitive market, the benefits of lower costs will be passed on to consumers as the capacity in the industry converts over time to the new technology. That is likely to occur in this case as well, since competition among providers will probably lead them to pass along their cost savings in the form of price reductions to consumers. However, the support level which produced the original prices will remain unchanged unless the model changes. For reasons described supra, it is undesirable for the plan to rely on changing the proxy model over time.

The auction process proposed by GTE will provide a method for reflecting in the support amount changes in technology over time. When an area is first bid, and each time it is rebid thereafter, the bids will reflect the carriers' best estimates of the cost of service they expect to face during the commitment period. This will happen automatically, without the need for the Commission to estimate any costs.

45. Is it appropriate for a proxy model adopted by the Commission in this proceeding to be subject to proprietary restrictions, or must such a model be a public document?

To be reasonably accurate, the models must undoubtedly contain some proprietary information, such as prices for equipment that reflect volume discounts. Further, in competitive markets, there is no justification for requiring routine disclosure of competitively sensitive proprietary information. Such proprietary information should not be made public, but should only be available for scrutiny by regulators, and to competitors under a protective agreement.

The algorithms used by the models themselves should be open to public scrutiny. At the minimum, there should be a full set of documentation which allows any potential user to view each key calculation made by the model.

46. Should a proxy model be adopted if it is based on proprietary data that may not be available for public review?

See response to question number 45, *supra*.

47. If it is determined that proprietary data should not be employed in the proxy model, are there adequate data publicly available on current book costs to develop a proxy model? If so, identify the source(s) of such data.

No response.

48. Should the materiality and potential importance of proprietary information be considered in evaluating the various models?

No, the degree of reliance upon proprietary information should not impact the acceptance of a model's output. Proprietary information represents the real cost that firms pay for equipment, and those real costs must be used in any model adopted by the Commission. Further, as discussed in the response to question number 45 *supra*, since proprietary information can be reviewed for validity, its use is not unreasonable.

Competitive Bidding

49. How would high-cost payments be determined under a system of competitive bidding in areas with no competition?

GTE has worked with Professor Paul Milgrom to revise and extend its proposal on competitive bidding for universal service. Professor Milgrom describes his recommendations in Attachment 1, "Statement of Paul R. Milgrom."

GTE proposes that the level of universal service support provided to the incumbent LEC to support its COLR obligation should be based, at the outset, on a comparison of the rate the COLR is allowed to charge and the estimate of the market rate derived from a proxy cost model.²⁸ A procedure would then be established which would allow other firms who wish to become COLRs in a given area to submit a Notice of Intent to bid to the state commission. This would trigger an auction process for that area; GTE proposes that these be held at regular intervals, perhaps twice a year. The

²⁸ As described *supra*, the sum of Federal and state funding should cover this amount. The division of responsibility between the Federal fund and state funds could be established by choosing the desired level for the federal benchmark above which Federal support would be provided.

process, carried out on a pre-announced schedule, under which areas would be noticed and auctioned is referred to as a "bidding cycle"

Thus, in areas where no party has yet prompted an auction, the incumbent's support would be determined on a cost basis. The plan provides a flexible mechanism which would introduce auctions in each area as circumstances there permit. The auction process would also be designed to determine endogenously the number of COLRs that should be supported in each area.

Professor Milgrom explains why, given the structure of the auction he proposes, two qualified bidders will be sufficient to ensure a successful auction. He further specifies rules which would govern circumstances in which that requirement is not met - that is, where an auction is held but only one qualified bid is received. This essentially involves canceling the auction, and returning to the previous support level. Given this design, there would never be a case in which a support level was determined by an auction with an insufficient number of bidders.

50. How should a bidding system be structured in order to provide incentives for carriers to compete to submit the low bid for universal service support?

The form of the auction proposed is a single round, sealed-bid auction.

Professor Milgrom explains why this format would make collusion among the bidders difficult to sustain. Each bidder would know that it could be excluded if any of the other parties defects, and bids aggressively. In a single round format, no other party would have the opportunity to match the defector's bid, or to punish the defector as a means of enforcing the collusion. Given these circumstances, the only way for a bidder to ensure against being excluded is to bid aggressively.

More generally, the structure of the plan must establish a clear framework which defines the purpose of the plan. Such a clear structure is necessary, regardless of whether the level of support is determined on a cost basis, or through a competitive bidding process. Central to this framework is the definition of the COLR obligation. Attachment 2, which excerpts from a paper by Dennis Weller, explains why a COLR obligation is an efficient means for distributing universal service funding. This is true because the customers in an area are heterogeneous, so that not all of them would be served voluntarily at an averaged level of support. Lacking the perfect information that would be required to optimize support for each customer individually, the Commission must rely on an averaged level of support for customers in each area. To assure that all customers would be served at that support level, an obligation to serve must be imposed on the carrier as a condition for accepting support. This basic premise is incorporated in the Act in the requirement that a carrier must be an "eligible telecommunications carrier" ("Etel") in order to be eligible for universal service support. The question facing the Commission, then, is what specific requirements should be adopted in order to implement this framework.

Failure to associate a COLR obligation with the receipt of funding would cause the plan to fail to meet the statutory requirements of the Act. The plan would not be competitively neutral if one carrier (the incumbent) is required to perform the COLR function, while another carrier can receive the same funding without performing that function. Further, such a plan will never be sufficient, because the COLR would never be able to sustain its obligation to serve in the face of entry by other carriers who could selectively serve only the customers they wished, and yet could receive the same

funding.²⁹

The universal service plan clearly must define the COLR obligation in more specific detail than is provided for in the Act. The Act specifies that an Eltel must hold itself out to serve all of the customers in an area, and advertise its rates. Yet without specification as to the terms and conditions of this obligation, it is without meaning. For example, carrier A could announce a basic service price, at which it will serve any carrier, of \$200 per month. The bill does not specify the price at which the Eltel is obligated to serve; yet clearly the maintenance of an affordable price is crucial to meeting the objectives of the Act. The carrier could further offer service to its "preferred" customers at \$15 per month; the Act does not specify that the Eltel must charge everyone the same price. If it advertised these prices, the carrier A would technically meet the obligations specified for Etlers in the Act; yet in fact it would be able to serve selectively, and would receive support for serving customers it would have chosen to serve anyway. If carriers could receive support on this basis, the objectives

²⁹ In a recent ex parte presentation, Ameritech emphasized the need to define the COLR obligation carefully as a prerequisite for a successful universal service plan. GTE strongly agrees. Ameritech provided a framework for analyzing such obligations, in which it distinguished between two basic types of obligations into which firms might enter with the government. Unilateral obligations are imposed on firms without compensation; an example might be health and safety regulations. Bilateral commitments are entered into by the firm and the government on a voluntary basis, with an exchange of considerations on both sides; an example might be a contract to supply military vehicles to the Pentagon. Where unilateral obligations are necessary, the distortion they impose on the market can be minimized by applying them symmetrically to all firms in an industry; for example, all automobile manufacturers must meet the same safety standards. The challenge facing the Commission and state regulators is to transform a COLR obligation which today is unilateral and asymmetric (it applies only to the LEC) into a bilateral commitment (that is, one for which the COLR is compensated) which is symmetric (the same for all COLRs). See Ameritech ex parte of 31 July 1996.

of the Act would be undermined, and the Commission would be unable to create an effective plan.

There is nothing in the Act that precludes state commissions, which are charged with certifying Eltels, and which have traditionally certified and regulated local carriers, from establishing specific requirements for the receipt of universal service funds.³⁰

"Eligibility" does not guarantee that a carrier will actually receive funds. Here, as with other aspects of the universal service plans, commissions will provide the specifics to implement the general framework set forth in the Act. State commissions also retain the ability to regulate local service, which they would be precluded from doing if the Act prevented them from establishing any requirements for COLRs. Further, the Commission can set guidelines for the states, in its Federal plan, as to how states will structure their COLR requirements, as a condition for the provision of Federal funding to carriers in each state. COLR requirements might include the ceiling on the rate the COLR can charge, terms and conditions of service, any quality standards, and limits on the carrier's ability to exit.³¹ Perhaps the most important guideline the Commission should establish for these state COLR requirements is that the state must apply the same obligations to all COLRs in a given area. This is necessary to ensure that the Federal plan is competitively neutral.

A clearly defined COLR obligation is also necessary as the basis for the structure

³⁰ GTE's Comments in D. 96-45, filed April 12, 1996 at 5 *et seq.* stresses that it would be a grave misinterpretation of the Act to assume that an Eltel that does not preserve and advance universal service will receive any funds at all.

³¹ See Ameritech Ex parte at 6.